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PTO/SB/21 (6-98)
Approved for use through 09/30/2000. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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| TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i> | Application Number | 10/045,814 |
| | Filing Date | January 15, 2002 |
| | First Named Inventor | Joseph M. Fukumoto |
| | Group Art Unit | 2879 |
| | Examiner Name | Unknown |
| Total Number of Pages in This Submission (Including Transmittal Forms) | Attorney Docket Number | PD-01W023 |

| ENCLOSURES (check all that apply) | | |
|--|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Assignment Papers (for an Application) | <input type="checkbox"/> After Allowance Communication to Group |
| <input type="checkbox"/> Fee Attached | <input type="checkbox"/> Drawing(s) | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment / Response | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Status Letter |
| <input type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Power of Attorney, Revocation, or Change of Correspondence Address | <input type="checkbox"/> Additional Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | |
| <input checked="" type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Small Entity Statement | |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> Request for Refund | |
| <input type="checkbox"/> Response to Missing Parts/Incomplete Application | Remarks | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|--|
| Firm or Individual name | John E. Gunther, Registration No. 43,649 |
| Signature | |
| Date | October 7, 2003 |

| CERTIFICATE OF MAILING | | | |
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| Typed or printed name | Joseph W. Stone | | |
| Signature | | Date | 10/7/2003 |

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PTO/SB/17 (10-03)

Approved for use through 07/31/2006. OMB 0651-0032

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 180.00

Complete if Known

| | |
|----------------------|--------------------|
| Application Number | 10/045,814 |
| Filing Date | January 15, 2002 |
| First Named Inventor | Joseph M. Fukumoto |
| Examiner Name | Unknown |
| Art Unit | 2879 |
| Attorney Docket No. | PD-01W023 |

METHOD OF PAYMENT (check all that apply)☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None☒ Deposit Account:Deposit
Account
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Deposit
Account
Name

50-0616

RAYTHEON COMPANY

The Director is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☒ Credit any overpayments☒ Charge any additional fee(s) or any underpayment of fee(s)☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.**FEE CALCULATION****1. BASIC FILING FEE**

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|------------------------|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1001 | 770 | 2001 | 385 | Utility filing fee | |
| 1002 | 340 | 2002 | 170 | Design filing fee | |
| 1003 | 530 | 2003 | 265 | Plant filing fee | |
| 1004 | 770 | 2004 | 385 | Reissue filing fee | |
| 1005 | 160 | 2005 | 80 | Provisional filing fee | |
| SUBTOTAL (1) | | | | | (\$) |

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

| | | Extra Claims | | Fee from below | | Fee Paid | |
|--------------------|--|--------------|--|----------------|--|----------|--|
| Total Claims | | -20** = | | X | | = | |
| Independent Claims | | -3** = | | X | | = | |
| Multiple Dependent | | | | | | | |

| Large Entity | | Small Entity | | Fee Description |
|--------------|----------|--------------|----------|--|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | |
| 1202 | 18 | 2202 | 9 | Claims in excess of 20 |
| 1201 | 86 | 2201 | 43 | Independent claims in excess of 3 |
| 1203 | 290 | 2203 | 145 | Multiple dependent claim, if not paid |
| 1204 | 86 | 2204 | 43 | ** Reissue independent claims over original patent |
| 1205 | 18 | 2205 | 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

| Large Entity | | Small Entity | | Fee Description | Fee Paid |
|--------------|----------|--------------|----------|--|----------|
| Fee Code | Fee (\$) | Fee Code | Fee (\$) | | |
| 1051 | 130 | 2051 | 65 | Surcharge - late filing fee or oath | |
| 1052 | 50 | 2052 | 25 | Surcharge - late provisional filing fee or cover sheet | |
| 1053 | 130 | 1053 | 130 | Non-English specification | |
| 1812 | 2,520 | 1812 | 2,520 | For filing a request for ex parte reexamination | |
| 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | |
| 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after Examiner action | |
| 1251 | 110 | 2251 | 55 | Extension for reply within first month | |
| 1252 | 420 | 2252 | 210 | Extension for reply within second month | |
| 1253 | 950 | 2253 | 475 | Extension for reply within third month | |
| 1254 | 1,480 | 2254 | 740 | Extension for reply within fourth month | |
| 1255 | 2,010 | 2255 | 1,005 | Extension for reply within fifth month | |
| 1401 | 330 | 2401 | 165 | Notice of Appeal | |
| 1402 | 330 | 2402 | 165 | Filing a brief in support of an appeal | |
| 1403 | 290 | 2403 | 145 | Request for oral hearing | |
| 1451 | 1,510 | 1451 | 1,510 | Petition to institute a public use proceeding | |
| 1452 | 110 | 2452 | 55 | Petition to revive - unavoidable | |
| 1453 | 1,330 | 2453 | 665 | Petition to revive - unintentional | |
| 1501 | 1,330 | 2501 | 665 | Utility issue fee (or reissue) | |
| 1502 | 480 | 2502 | 240 | Design issue fee | |
| 1503 | 640 | 2503 | 320 | Plant issue fee | |
| 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | |
| 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | |
| 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | 180.00 |
| 8021 | 40 | 8021 | 40 | Recording each patent assignment per property (times number of properties) | |
| 1809 | 770 | 2809 | 385 | Filing a submission after final rejection (37 CFR 1.129(a)) | |
| 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37 CFR 1.129(b)) | |
| 1801 | 770 | 2801 | 385 | Request for Continued Examination (RCE) | |
| 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | |

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 180.00

SUBMITTED BY

(Complete if applicable)

| | | | | | |
|-------------------|-----------------|-----------------------------------|-----------------|-----------|--------------|
| Name (Print/Type) | John E. Gunther | Registration No. (Attorney/Agent) | 43,649 | Telephone | 310-647-3723 |
| Signature | | Date | October 7, 2003 | | |

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Patent
PD-01W023

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| | |
|---|-------------------------|
| In re Application of: |) Date: October 7, 2003 |
| JOSEPH M. FUKUMOTO |) |
| Serial No.: 10/045,814 |) Art Unit: 2879 |
| Filed: January 15, 2002 |) |
| Title: RUBIDIUM TITANYL ARSENATE- SILVER GALLIUM SELENIDE TANDEM OPTICAL PARAMETRIC OSCILLATOR |) Examiner: |

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313

Dear Sir:

The references cited on the enclosed form PTO/SB/08A (copy of references enclosed) may be material to the examination of the above-identified patent application and are, therefore, submitted in compliance with the duty of disclosure defined in 37CFR 1.56.

This Information Disclosure Statement is not to be construed as a representation that a search has recently been made, or that additional information constitutes prior art.

I hereby certify that each item in the Search Report was cited by a foreign patent office, in a counterpart foreign application, not more than three (3) months prior to the filing of this Statement.

Respectfully submitted,

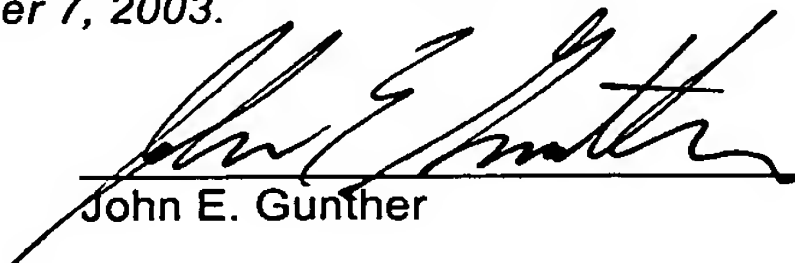
10/17/2003 EAREGAY1 00000075 500616 10045814

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Bldg. E4, Mail Station N119
P.O. Box 902
El Segundo, CA 90245

By 
John E. Gunther
Registration No. 43,649
(310) 647-3723

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John E. Gunther



Approved for use through 04/30/2003. OMB 0651-0031

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Substitute for form 1449/PTO

(Use as many sheets as necessary)

| | | | |
|-------|---|----|---|
| Sheet | 1 | of | 2 |
|-------|---|----|---|

Complete if Known

| | |
|------------------------|--------------------|
| Application Number | 10/045,814 |
| Filing Date | January 15, 2002 |
| First Named Inventor | Joseph M. Fukumoto |
| Art Unit | 2879 |
| Examiner Name | Unknown |
| Attorney Docket Number | PD-01W023 |

U. S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

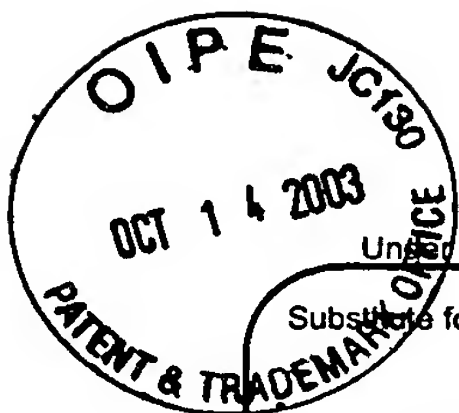
| FOREIGN PATENT DOCUMENTS | | | | | | |
|--------------------------|--------------------------|---|-----------------------------------|--|---|----------------|
| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date MM-DD-YYYY | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear | T ⁶ |
| | | Country Code ³ -Number ⁴ -Kind Code ⁵ (if known) | | | | |
| | | WO 01-82420-A | 11-01-2001 | Raytheon Co. | | |
| | | WO 01-50555-A | 07-12-2001 | Raytheon Co. | | |
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|-----------------------|--|--------------------|--|
| Examiner Signature | | Date Considered | |
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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

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| INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary) | | Complete if Known | |
| | | Application Number | 10/045,814 |
| | | Filing Date | January 15, 2002 |
| | | First Named Inventor | Joseph M. Fukumoto |
| | | Art Unit | 2879 |
| | | Examiner Name | Unknown |
| Sheet 2 | of 2 | Attorney Docket Number | PD-01W023 |

| NON PATENT LITERATURE DOCUMENTS | | | |
|---------------------------------|-----------------------|---|----------------|
| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T ² |
| | | CHANDRA, S. ET AL.: "Continuously Tunable, 6-14 Mum Silver-Gallium Selenide Optical Parametric Oscillator Pumped at 1.57 Mum", Applied Physics Letters, American Institute of Physics, NY, US, Vol. 71, no. 5, 4 August 1997, pgs. 584-586, XP000699619. | |
| | | MOORE, G. T. ET AL.: A Simultaneously Phase-Matched Tandem Optical Parametric Oscillator" IEEE Journal of Quantum Electronics, IEEE, Vol. 34, No. 5, 1 May 1998, pgs. 803-810, XP000751982. | |
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| Examiner Signature | | Date Considered | |
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